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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,614	07/31/2003	Joseph Karl Brauch	MIIIBaffle.CIP	4744

7590 03/25/2005

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EXAMINER

RIVELL, JOHN A

ART UNIT PAPER NUMBER

3753

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/632,614	Applicant(s) BRAUCH ET AL. e)	
	Examiner John Rivell	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/23/04 (election).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 33-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 33-46 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07262004</u> . | 6) <input type="checkbox"/> Other: _____ |

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 3653.

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the correction to the drawings, filed December 23, 2004 did not include formal drawings as indicated. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claims 7-32 have been canceled. New claims 33-47 have been added. Thus claims 1-6 and 33-47 are pending.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 34-35, 37-42 and 44-46 are rejected under 35 U.S.C. §102 (b) as being anticipated by Barker.

The patent to Barker discloses "a flow controller for releasably blocking a flow of liquid in a flow path defined by a closed perimeter (read on the interior of the pipeline at the valve seat i), the flow controller (valve head r) comprising: a rigid self-supporting panel configured to overlap the closed perimeter, the panel being provided with a first

hinge member (S, S') configured to mount the panel in a normal orientation overlapping the closed perimeter (seat) to substantially block the flow path, the first hinge member being further configured to allow the panel to move from the normal orientation (closed) to release (open) the flow of the liquid, the panel being further configured with a torque member (weight u) to define an amount of a normal process force of the flow of the liquid to be substantially blocked by the panel (r) and an amount of a hydrodynamic force of the flow of the liquid to be released by the panel" as recited in claim 1.

Regarding claim 2, in Barker, "the panel (r) has a first axis extending parallel to a first side of the perimeter (the top edge of the plate r) and a second axis extends away from the first axis the first hinge member (S,S') being parallel to the first axis, and the torque member (u) is located along the second axis (perpendicular to and) spaced from the first axis to apply a restorative torque to the panel (r) in opposition to the amount of the normal process force of the flow of the liquid substantially blocked by the panel" as recited.

Regarding claim 3, in Barker, "the panel (r) has a first axis extending parallel to a first side of the perimeter (at the upper edge) and a second axis extending away from the first axis, the first hinge member (S, S") being parallel to the first axis, and the torque member (u) is located along the second axis spaced from (and perpendicular to) the first axis to apply a restorative torque to the panel in opposition to and less (the force applied by the weight is always "less than" the hydrodynamic force otherwise the valve would never open) than the amount of the hydrodynamic force of the flow of the liquid to be released by the panel" as recited.

Regarding claim 34, Barker discloses “a flow controller for releasably blocking a flow of liquid that in an unblocked condition would flow in a flow path defined by a closed perimeter (at valve seat i) that is in a vertical orientation, the flow controller comprising: a rigid self-supporting panel (r) configured with a hinge member (S, S') to mount the panel in a normal vertical orientation overlapping the closed perimeter (seat i) to substantially and releasably block the flow path, the hinge member (S, S') being configured to allow the panel to move from the normal (closed) orientation to a release (open) orientation, the panel being further configured to urge (via weight u) the panel to resist a normal value of a process force of the flow of the liquid by remaining substantially in the vertical orientation, the panel being further configured to allow the flow of the liquid in the flow path and having an uncontrollable value of a hydrodynamic force so that the hydrodynamic force is released by movement of the panel substantially in relation to the vertical orientation, the movement being to the release orientation” as recited.

Regarding claim 35, in Barker, “the configuration of the panel to urge and allow comprises a torque member (weight u) secured to the panel at a location spaced by a moment arm distance from the hinge member (S, S'), the torque member (u) having a weight selected to act around the hinge member against the normal value of the process force so that the panel remains substantially in the vertical orientation; the weight is further selected to act around the hinge member against the uncontrollable value of the hydrodynamic force to permit the movement of the panel to the release

orientation beyond a location of the panel remaining substantially in the vertical orientation so that the hydrodynamic force is released" as recited.

Regarding claim 37, in Barker, "the resistance to the flow of the liquid by the panel in the normal vertical orientation or substantially in the vertical orientation avoids interference with desired processing of the liquid; the release of the hydrodynamic force minimizes damage to the flow controller from the hydrodynamic force; the panel has a first axis extending generally horizontally and a second axis extending generally vertically (parallel to the hinge), the hinge member (S, S') is parallel to the first axis; and the torque member (u) is located along the second axis (perpendicular to and) vertically spaced from the first axis, the configuration of the torque member (u) comprises weight acting around the hinge member (S, S') to apply a restorative torque to the panel (r) in opposition to the normal value of the process force, the weight has a value less than that required to resist the uncontrollable value of the hydrodynamic force by maintaining the panel substantially in the vertical orientation, and that value of the weight is such that when that weight acts around the hinge member the hydrodynamic force is released by the movement of the panel to the release orientation so that there is substantial flow of the liquid in the flow path past the flow controller in response to the hydrodynamic force" when the valve opens as recited.

Regarding claim 38, in Barker, "the configuration of the panel (r) includes an upper side and the hinge member (S, S') located adjacent to the upper side" as recited.

Regarding claim 39, in Barker, "the configuration of the panel (r) includes an upper side and the first axis vertically spaced from the upper side" as recited.

Regarding claim 40, Barker discloses "a flow controller for releasably blocking a flow of liquid, in an undesired unblocked condition the liquid being allowed to flow in a generally horizontal flow path, the flow controller comprising: a rigid self-supporting panel (r) configured to block (close) the flow path; and a hinge member (S, S') configured with an axis of rotation to mount the panel (r) in a normal vertical or substantially-vertical orientation to substantially and releasably block the flow path, the hinge member (s, S') being further configured to allow the panel to rotate on the axis of rotation in a desired range from the normal vertical (closed) orientation to the substantially-vertical (open) orientation, the first hinge member being further configured to allow the panel to rotate on the axis of rotation past the substantially-vertical orientation to a flow release orientation out of the desired range; the panel being further configured with a torque member (weight u) spaced from the axis of rotation and having a weight value selected so that under the force of gravity the torque member acts through a moment arm around the axis of rotation to urge the panel to rotate on the axis of rotation and resist a normal process force of the flow of the liquid, the selected weight value allowing limited rotation of the panel on the axis of rotation so that notwithstanding the normal process force the panel remains in a position within the desired range, the selected weight value also allowing further rotation of the panel on the axis of rotation in response to a hydrodynamic force of the flow of the liquid, the hydrodynamic force generally substantially exceeding the normal process force, the allowed further rotation being movement out of the desired range so that the hydrodynamic force is released" as recited.

Regarding claim 41, in Barker, "the configuration of the panel (r) with the selected weight value acting through the moment arm around the axis of rotation is such that as the hydrodynamic force subsides, the force of gravity on the torque member (u) having the selected weight value acting through the moment arm around the axis of rotation urges the panel to rotate on the axis of rotation to resist the subsiding hydrodynamic force so that upon cessation of the hydrodynamic force the panel is oriented within the desired range" as recited.

Regarding claim 44, in Barker "the blockage of the flow of the liquid by the panel (r) located in the desired range avoids interference with desired processing of the liquid, and the release of the hydrodynamic force reduces damage to the panel; the axis of rotation of the hinge member extends generally horizontally and a second axis of the panel extends generally vertically; and the torque member is located along the second axis vertically spaced from the axis of rotation" as recited.

Regarding claim 45, in Barker, "the configuration of the panel includes an upper side and the first axis extending adjacent to the upper side" as recited.

Regarding claim 46, in Barker, "the configuration of the panel includes an upper side and the axis of rotation vertically spaced from the upper side" as recited

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3753

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker in view of McCabe.

The patent to Barker discloses all the claimed features with the exception of having "the panel... configured with a central web surrounded by a solely-bent frame".

The patent to McCabe, in figure 1, discloses that it is known in the art to employ a pivotal valve element 18, surrounded by a "solely-bent" frame at 46, 38, 48 for the purpose of physically mounting the valve element and supporting body within the flow path.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Barker a "solely-bent frame" about the valve plate for the purpose of physically mounting the valve element and supporting body within the flow path as recognized by McCabe.

Regarding claim 33, in the device of the combination, "the frame further comprises a lower section; and the torque member (u) is located adjacent to the lower section" as recited.

Claims 6, 36, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker in view of the Enduro brochure cited by applicant.

The patent to Barker discloses all the claimed features with the exception of having "redwood" or "reinforced plastics" as the material of the valve plate.

The brochure to Enduro cited by applicant discloses that it is known in the art to employ "redwood", as has been done, or to employ Enduros' reinforced plastic as the

material for the fluid contacting member for the purpose of long lasting endurance in the water environment in which the devices are employed.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Barker, "redwood" or "reinforced plastics" as the material for the valve plate r for the purpose of long lasting endurance in the water environment in which the device is employed as recognized by the Enduro brochure cited by applicant.

Claim 47 is allowed.


Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Rivell
Primary Examiner
Art Unit 3753